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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 09/550,181
Filing Date: April 14, 2000
Appellant(s): TRAN, TRUNG MINH

Steven T. McDonald
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed December 6, 2004.

(1) *Real Party in Interest*

A statement identifying the real party in interest is contained in the brief.

(2) *Related Appeals and Interferences*

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

(3) *Status of Claims*

The statement of the status of the claims contained in the brief is correct.

(4) *Status of Amendments After Final*

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) *Summary of Invention*

The summary of invention contained in the brief is correct.

(6) *Issues*

The appellant's statement of the issues in the brief is correct.

(7) *Grouping of Claims*

Appellant's brief includes a statement that claims 1-11, 13-19, 21-40 do not stand or fall together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

(8) *Claims Appealed*

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) *Prior Art of Record*

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6,088,700	LARSEN et al.	9-2000
6,366,947	KAVNER	4-2002
6,154,738	CALL	11-2000
5,790,668	TOMKO	8-1998

(10) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
2. Claims 1-7, 9, 11, 13-18, 21-27, 29-33, 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Larsen et al., US Patent Number 6,088,700, hereinafter Larsen, in view of Kavner, US Patent Number 6,366,947, hereinafter Kavner.
3. Referring to claim 1, Larsen has taught a method for maintaining state information for web page (see title and abstract), comprising:
 - a. receiving user input to a Web page via a Web browser at a client device (abstract lines 3-4, fill out data field ... multiple forms ...on the web browser of users... Col 2 lines 8-13, 24-35, Col 3 lines 28-30, Col 17 lines 14-16, the user input is used for future automatically form filling on the web page via a browser of users);

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- b. sending an instruction to store user input and a Web page field identifier in a directory server (Col 2 lines 31-38, information entered by the user are stored in the database, and the forms are transmitted ... are stored for later retrieval, updating and printing by the user; Col 3 lines 12-14, database is located in a server);
- c. storing the user input and a corresponding web page field identifier in the directory server (Col 2 lines 31-38, information entered by the user are stored in the database, and the forms are transmitted ... are stored for later retrieval, updating and printing by the user; Col 3 lines 12-14, database is located in a server);
- d. in response to receiving a user request, via the Web browser, for the Web page, sending a request to the directory server to retrieve the user input and corresponding Web page identifier (Col 3 line 59 – Col 4 line 8, Abstract line 7-13), wherein the user input and corresponding Web page field identifier are retrieved from the directory server (abstract, Col 2 lines 8-11, 20-38.)

Larsen has not taught the use of background application.

However, Kavner has taught a system which is able to ownload or send requests to update local cache information from the server in the background (Col 5 lines 16-19, 30-36, Col 11 lines 31-37).

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to incorporate this background process of Kavner into Larsen

because both have taught inventions regarding to information retrieval from a server to a client in a network communication environment.

A person with ordinary skill in the art would have been motivated to make the incorporation to Larsen because it would allow user to get the benefit of being able to see the web page immediately while the resources that have changed since they were previously downloaded are updated in the background as taught by Kavner (Col 4 lines 56-59), and also would shift some burden from the active application since some tasks are being assigned to the background application.

4. Referring to claim 2, Larsen has further taught wherein the user input and Web page field identifier are common to a plurality of Web pages (Col 17 lines 25-29.)
5. Referring to claim 3, Larsen has further taught wherein the user input and Web page field identifier are common to a plurality of Web pages (Col 17 lines 34-38.)
6. Referring to claim 4, Larsen has further taught the method of claim 1, further comprising: matching the Web page field identifier to an entry field identifier located in the Web page (Col 17 lines 46-56); and inserting the user input into a field associated with the entry field identifier (abstract lines 7-11.)
7. Referring to claim 5, Larsen has further taught the method of claim 1, further comprising:
 - receiving a Web page retrieval request having a web page identifier identifying the Web page from a Web browser running on the client device (Col 2 lines 35-38, Col 3 lines 2-4, 61-64); and
 - sending the Web page identifier to the directory server from the background application running on the client device (Col 3 lines 64-67); and

receiving the user input and Web page field identifier from the directory server in response to sending the Web page identifier from the background application running on the client device (Col 4 lines 3-25);

8. Referring to claim 6, Larsen has further taught the method of claim 5, further comprising inserting the user input into a field of the web page corresponding to the Web page field identifier (abstract line 1-7.)
9. Referring to claim 7, Larsen has further taught wherein the user input and the Web page field identifier are stored in a Web page entry of the directory server identified by a user identifier and a Web page identifier (see table provided from Col 5-15, `client_id` is considered as user identifier, and `tag_id`, `form_id` are all sort of a Web page identifier, however the function of the claim is taught by Larsen where a Web page identifier is being stored in an entry (the table) in the directory server (database), which is identified by user ID and webpage ID.)
10. Referring to claim 9, Larsen has further taught wherein the Web page field identifier is a HyperText Mark-up Language tag (Col 18 lines 42-44.)
11. Referring to claim 11, Larsen has further taught wherein the method is implemented using a plug-in application to a Web browser (Col 4 lines 1-20, PDF format files is being used by Larson in his invention, therefore an plug-in application (Adobe Reader) is being used to implemented the invention.)
12. Referring to claims 13-18, claims 13-18 encompass the same scope of the invention as that of the claims 1-6. Therefore, claims 13-18 are rejected for the same reason as the claims 1-6.

13. Referring to claims 21-27, claims 21-27 encompass the same scope of the invention as that of the claims 1-7. Therefore, claims 21-27 are rejected for the same reason as the claims 1-7.
14. Referring to claims 29-33, and 35, claims 29-33 and 35 encompass the same scope of the invention as that of the claims 1-7, and 9. Therefore, claims 29-33 and 35 are rejected for the same reason as the claims 1-7, and 9.
15. Referring to claims 21-27, claims 21-27 encompass the same scope of the invention as that of the claims 1-7. Therefore, claims 21-27 are rejected for the same reason as the claims 1-7.
16. Referring to claims 36-40, claims 36-40 encompass the same scope of the invention as that of the claims 1, 5, 6. Therefore, claims 36-40 are rejected for the same reason as the claims 1, 5, 6.
17. Claims 8, 19, 28, 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Larsen in view of Kavner and in further view of Tomko, US Patent Number 5,790,668, hereinafter Tomko.
18. Referring to claim 8, Larsen as modified has taught where in the user input is stored in the directory server (see previous paragraphs.)

Larsen as modified has not explicitly taught the user input is encrypted before being stored.

However, Tomko has taught the input data is encrypted before being stored at the selected address (Col 7 lines 53-55. A method to provide encryption to user inputs in order to secure the provided information.)

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to modify the teaching of Larsen such that to have the user input encrypted before being stored, because a security is provided to Larsen's data communication as taught by Tomko.

A person with ordinary skill in the art would have been motivated to make the modification to Larsen in view of Kavner because having the input being encrypted would provide the security to the input (see title of Tomko.)

19. Referring to claims 19, 28, 34, claims 19, 28, 34 encompass the same scope of the invention as that of the claim 8. Therefore, claims 19, 28, 34 are rejected for the same reason as the claim 8.
20. Claims 10 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Larsen in view of Kavner and in further view of Call, US Patent Number 6,154,738, hereinafter Call.
21. Referring to claim 10, Larsen as modified has not taught the directory server in claim 1, however, Larsen as modified has not explicitly taught wherein the directory server is an LDAP server.

However, Call has taught that a LDAP server maybe advantageously employed to store "entries".... (Col 20 lines 27-Col 21 lines 4; which show that LDAP server could be also viewed as a directory server.)

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to modify the teaching of Larsen in view of Kavner such that to have the directory server to be the LDAP server, because LDAP server is already well

known in the art to be a directory server as being developed at the University of Michigan and later further developed by Netscape Communication Corp. provides both access and update capabilities. (Col 20 lines 30-34.)

A person with ordinary skill in the art would have been motivated to make the modification to Larsen in view of Kavner because LDAP is not a newly invented server, which is already known in the art.

22. Referring to claim 36, claim 36 encompasses the same scope of the invention as that of the claim 10. Therefore, claims 36 are rejected for the same reason as the claim 10.

(11) *Response to Argument filed on December 6, 2004*

Appellants argued in substance that:

- a. Larsen does not teach or suggest sending an instruction to store user input and a Web page field identifier in a directory server from a background application running on the client device or sending a request from the background application running on the client device to the directory server to retrieve the user input and corresponding Web page field identifier. (page 12 lines 3-6, Grouping: Claims 1, 13, 21, 29, 37 and 38.)
- b. Neither Larsen nor Kavner provide any suggestion to use the background application of Kavner to send user input and a Web page field identifier to be stored in a directory server or retrieve the user input to the web page that is stored in a directory server and its corresponding Web page identifier (page 14 lines 23-26).
- c. Even if a person of ordinary skill in the art were led to combine Larsen and Kavner, the resulting combination would still not result in a system or method in which an

- instruction to store user input and a Web page identifier is sent to directory server from the back ground application running on a client device (page 16 lines 7-10).
- d. Neither Larsen nor Kavner teach or suggest that the user input and web page filed identifier are specific to a particular Web page (page 18, lines 25-26, Grouping: Claims 2, 14, 22, and 30).
 - e. Larsen does not teach or suggest that the user input and Web field identifier are common to a plurality of web pages (page 19 lines 8-9, Grouping: Claims 3, 15, 23, and 31).
 - f. Larsen does not teach or suggest matching the web page field identifier to an entry field identifier located in the Web page or inserting the user input into a field associated with the entry field identifier (page 19 lines 27-29, Grouping: Claims 4, 16, and 24).
 - g. Larsen does not teach sending the Web page identifier to the directory server from the background application running on the client device or receiving the user input and Web page field identifier from the directory server in response to sending the Web page identifier from the background application on the client device (page 20 lines 28-31. Grouping: Claims 5, 17, and 25)
 - h. Larsen does not teach inserting user input into a field of a Web page corresponding to the Web page identifier (page 22, Grouping: Claims 6, 18, 26, 40).
 - i. Larsen does not teach that the user input and the Web page field identifier are stored in a Web page entry of the directory server identified by a user identifier and a Web page identifier (page 22 Grouping: Claims 7, 27 and 33).

- j. Larsen does not teach that the Web page field identifier is a HTML tag (page 23 Grouping: Claims 9, 35 and 39).
- k. Larsen does not teach that the method is implemented using a plug-in application to a Web browser (page 23, Grouping: Claim 11.)
- l. Larsen does not teach receiving, from the background application running on the client device, a Web page identifier identifying a Web page or sending the user input and Web page identifier to the background application running on the client device from the directory server (page 24, Grouping: Claim 32.)
- m. Tomko does not teach that the user input is encrypted before being stored in the directory server (Page 25 last line – page 26 line 1).
- n. Call does not teach the LDAP server as a directory server that stores user input entered by a user to a Web page via a Web browser and corresponding Web page field identifier (page 29 last line – page 30 line 2.)

In reply to argument (a), Larsen teaches (all the citation could be found in the Final Rejection filed on June 8, 2004) sending an instruction to store user input and a Web page field identifier in a directory server from a application running on the client device (Col 2 lines 31-38, information entered by the user are stored in the database, and the forms are transmitted ... are stored for later retrieval, updating and printing by the user; Col 3 lines 12-14, database is located in a server) or sending a request running on the client device to the directory server to retrieve the user input and corresponding Web page field identifier (Col 3 line 59 –Col 4 line 8, Col 2 lines 8-11, 20-38, and abstract). The only difference between Larsen and the claimed invention is the “background application”. Larsen does not explicitly

state his invented function is performed in the background. However, the rejection is not solely relied on Larsen. Applicant states in his disclosure, the background application, for example, is a plug-in application to a Web Browser (Specification, page 11 line32 –page 12 line 8). The Secondary reference provided by the Examiner, Kavner explicitly teaches a system, which is able to download or send requests from the server in the background (Col 5 lines 16-19, 30-36, Col 11 lines 31-37) and Kavner also states this background application could be a “plug-in” (Col 3 lines 44-51). In conclusion to argument (a), Although Larsen does not teach the background application, the claims are rejected over Larsen in views of Kavner, therefore the Examiner found the argument is not persuasive.

In reply to argument (b), Larsen teaches automated form filling on a browser, where the data process system retrieves tagged information previously entered by the user (Col 2 lines 24-35). Kavner teaches the local cache retrieves information from server for updates (Col 5 lines 16-19). It is clear both of Larsen and Kavner teach systems for information retrievals from servers to clients in a network by using applications running on clients, which gives the ground for Larsen and Kavner to combine. And a suggestion is given by Kavner to a person with ordinary skill in the art, because it would allow user to get the benefit of being able to see the web page immediately while the resources that have changed since they were previously downloaded are updated in the background as taught by Kavner (Col 4 lines 56-59), and also would shift some burden from the active application since some tasks are being assigned to the background application.

In reply to argument (c), once Larsen and Kavner are combined, it will be resulting Larsen using the “plug-in” (background application) from its browser as suggested by Kavner to retrieve the tagged information in order to fill the forms.

In reply to argument (d), each unique registered form template are displayed on the web browsers to the user (abstract lines 1-5, and Col 17 lines 25-29). Since these forms are stored in a remote server and are being retrieved and displayed on a client device, the displayed forms are viewed as “Web page”. The fundamental concept of a web page is a remote document being retrieve through a network so called “web” and display as a “page” to the user at the local site. In this case, forms are uniquely stored in a remote server along with the user inputs for later retrievals to automatically fill the forms are viewed as Web pages

In reply to argument (e), in Col 4 lines 39-44 of Larsen states “Common tags identify information that may appear on more than one form, such as applicant’s first name, but will be only stored once”, which clearly shows the user input and Web page field identifier are common to a plurality of Web pages.

In reply to argument (f), applicant argues Larsen does not teach the Web page field identifier is matched to an entry identifier located in the Web page. However, each unique registered form template are displayed on the web browsers to the user (abstract lines 1-5, and Col 17 lines 25-29). Since these forms are stored in a remote server and are being retrieved and displayed on a client device, the displayed forms are viewed as “Web page”. The fundamental concept of a web page is a remote document being retrieve through a network so called “web” and display as a “page” to the user at the local site. In this case,

forms are uniquely stored in a remote server along with the user inputs for later retrievals to automatically fill the forms are viewed as Web pages, and the data fields are viewed as Web page fields.

In reply to argument (g), Larsen teaches sending the Web page identifier to the directory server from a application running on the client device (Col 3 lines 64-67) or receiving the user input and Web page field identifier from the directory server in response to sending the Web page identifier from a application on the client device (Col 4 lines 3-25). The only difference between Larsen and the claimed invention is the “background application”.

Larsen does not explicitly state his invented function is performed in the background.

However, the rejection is not solely relied on Larsen. Applicant states in his disclosure, the background application, for example, is a plug-in application to a Web Browser (Specification, page 11 line32 –page 12 line 8). The Secondary reference provided by the Examiner, Kavner explicitly teaches a system, which is able to download or send requests from the server in the background (Col 5 lines 16-19, 30-36, Col 11 lines 31-37) and Kavner also states this background application could be a “plug-in” (Col 3 lines 44-51). In conclusion to argument (g), Although Larsen does not teach the background application, the claims are rejected over Larsen in views of Kavner, therefore the Examiner found the argument is not persuasive.

In reply to argument (h), Larsen does teach inserting the user input into a field of the Web page corresponding to the Web field identifier (abstract line 1-7). Applicant’s main argument is presented on argument (g) where Larsen does not teach receiving user input and Web page field identifier from the directory server in response to sending the Web page

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identifier from the background application on the client device. However, as stated in reply to argument (g), Larsen teaches sending the Web page identifier to the directory server from a application running on the client device (Col 3 lines 64-67) or receiving the user input and Web page field identifier from the directory server in response to sending the Web page identifier from a application on the client device (Col 4 lines 3-25). The only difference between Larsen and the claimed invention is the “background application”. Larsen does not explicitly state his invented function is performed in the background. However, the rejection is not solely relied on Larsen. Applicant states in his disclosure, the background application, for example, is a plug-in application to a Web Browser (Specification, page 11 line 32 –page 12 line 8). The Secondary reference provided by the Examiner, Kavner explicitly teaches a system, which is able to download or send requests from the server in the background (Col 5 lines 16-19, 30-36, Col 11 lines 31-37) and Kavner also states this background application could be a “plug-in” (Col 3 lines 44-51). In conclusion to argument (g), Although Larsen does not teach the background application, the claims are rejected over Larsen in views of Kavner, therefore the Examiner found the argument is not persuasive.

In reply to argument (i), applicant argues that the user ID and the Web page ID of Larsen are stored in different tables are not considered as an entry in the directory server. The Examiner disagrees. Both user ID and Web page ID of Larsen are stored in a remote server (see table provided from Col 5-15, client_id is considered as user identifier, and tag_id, form_id are all sort of a Web page identifier, however the function of the claim is taught by Larsen where a Web page identifier is being stored in an entry (the table) in the directory server (database), which is identified by user ID and Web page ID.) Tables are names given

by the humans to clarify and organize data. For example, Data for each of the tables as applicant stated were stored in a remote server's memory at different blocks (let's make it blocks 1-5 for the entire memory, and blocks 1, 3, 5 contain data for Table I, and blocks 2 and 4 contain data for Table II). It is possible for a user to store information into blocks 1 and 2 as a single entry and it is also possible to retrieve data from blocks 1 and 2 in one query without knowing the existence of Table I and II. Therefore applicant's argument is not persuasive.

In reply to argument (j), applicant argues that Larsen does not teach the Web Page identifier is a HTML tag. This is not found persuasive because Larsen has taught the form templates are in HTML format (Col 18 lines 42-44), since the tags are for the HTML template, the Web page identifier for the HTML temple is a HTML tag.

In reply to argument (k), applicant argues that Larsen does not teach that the method is implemented using a plug-in application to a Web browser. However, the rejection is not solely relied on Larsen. Applicant states in his disclosure, the background application, for example, is a plug-in application to a Web Browser (Specification, page 11 line32 –page 12 line 8). The Secondary reference provided by the Examiner, Kavner explicitly teaches a system, which is able to download or send requests from the server in the background (Col 5 lines 16-19, 30-36, Col 11 lines 31-37) and Kavner also states this background application could be a "plug-in" (Col 3 lines 44-51).

In reply to argument (l), applicant argues Larsen does not teach any background application that is running on the client device. However, the rejection is not solely relied on Larsen. Applicant states in his disclosure, the background application, for example, is a

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plug-in application to a Web Browser (Specification, page 11 line 32 –page 12 line 8). The Secondary reference provided by the Examiner, Kavner explicitly teaches a system, which is able to download or send requests from the server in the background (Col 5 lines 16-19, 30-36, Col 11 lines 31-37) and Kavner also states this background application could be a “plug-in” (Col 3 lines 44-51). Although Larsen does not teach the background application, the claims are rejected over Larsen in view of Kavner. Larsen teaches automated form filling on a browser, where the data process system retrieves tagged information previously entered by the user (Col 2 lines 24-35). Kavner teaches the local cache retrieves information from server for updates (Col 5 lines 16-19). It is clear both of Larsen and Kavner teach systems for information retrievals from servers to clients in a network by using applications running on clients, which gives the ground for Larsen and Kavner to combine. Therefore the argument is not persuasive.

In reply to argument (m), applicant argues Tomko does not teach the user input is encrypted before being stored in the directory server. Larsen teaches the user input is stored in the directory server (abstract lines 1-4.) The only element Larsen is missing in claim 8 is the encryption before storing. However, Tomko discloses in Col 7 lines 53-55 “the inputted data is encrypted before being stored.” Which suggests any person with ordinary skill in the art to encrypt data before storing it to the database for security reasons (Col 1 lines 30-32).

In reply to argument (n), applicant argues Call does not teach the LDAP server as a directory server that stores user input entered by a user to a Web page via a Web browser and corresponding Web page field identifier. However, Larsen does teach a directory server that stores user input entered by a user to a Web page via a Web browser and corresponding Web

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page field identifier (see rejection to claim 1). What Call discloses is a LDAP server (Col 20 line 27-Col 21 line 4) where the LDAP server may be advantageously employed to store entries (Col 20 lines 52-53). Larsen's system requires a server that is able to store entries in it and Call is disclosing a server, which is capable of storing entries, therefore it is obvious to have LDAP server to be Larsen's directory server. The Examiner does not believe the claim limitation in claim 10 is patentable since applicant is claiming "wherein the directory server is an LDAP server.", and "LDAP server" is not invented by the applicant.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

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March 8, 2005

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